



Key Words & Concepts

Water Cycle

water cycle – the continual process of water moving in various forms (liquid, vapor and solid) between, across, and through earth's surface and earth's atmosphere.

precipitation – water moving from the air to the ground, such as rain, snow, hail, or sleet.

evaporation – process of water changing from liquid into vapor by application of heat.

transpiration – process of water entering the atmosphere from plants.

condensation – process of water changing from vapor back into liquid droplets.

surface water – water that flows or resides above ground in streams, lakes, rivers, and wetlands.

ground water – water that flows or resides underground, including in water-rich layers called aquifers.

river – a large natural stream of moving water that flows to a lake or ocean.

wetland – area usually covered by shallow water, or containing waterlogged soil.

glacier – water in the form of a large mass of slowly moving ice.

ocean – very large body of salt water.

watershed – land area from which water drains to a particular water body.

Geology

geology - the study of the origin and history of the earth; the study of rocks.

fossil - any trace or remnant of a life form from a past geological age, embedded in rocks. strata - layers of rock.

erosion - breakdown or weathering of rocks, sediment or soil by wind, water, etc.

sedimentary - a classification of rocks created by deposits of sediment (particles of silt, sand, clay, etc.)

Ice Age - common name for the time during which glaciers were abundant.

glacier - a large mass of slowly moving ice.

geological era - a basic division of geological time, composed of one or more periods.

geological period - a portion of a geological era.

geological epoch - a portion of a geological period Aquatic Invertebrates.

aquatic – living all or nearly all of the life cycle in water; pertaining to water.

macroinvertebrate – an animal that lacks an internal skeleton and is big enough to be seen with the naked eye.

tolerant – able to live in poor quality water systems; not sensitive.

sensitive – not able to survive in poor quality water.

high water quality – usually defined by cooler water temperature, little suspended sediment, high level of oxygen, lack of pollutants, and many sensitive macroinvertebrate species.

herbivore – an animal that feeds primarily on plants.

nymph – immature phase of development in insects, often somewhat similar in appearance to the adult form, but with no developed wings and smaller in size. (example: mayfly, mayfly nymph).

larvae – immature phase of development in insects, usually very different in appearance from the adult form (example: caterpillar, butterfly).

filter feeder – an animal that catches food drifting in the water.

decomposers – organisms that break down dead organic material and make the nutrients available again to the ecosystem.

Birds

adaptation – a modification in behavior, physical feature, or other characteristic that helps a living thing survive in its environment.

habitat - the surroundings where a plant or animal lives and finds the resources it needs for life, including food, water, shelter, and space.

fresh water marsh - a wetland where fresh (non-salty) water normally exists all year. pond - a still body of water smaller than a lake, often shallow enough for rooted plants to grow throughout.

forest – an ecosystem in which trees are the most dominant member.

prairie – a grassland community; ecosystem in which grasses are dominant.

wetland – a wet land with specialized soil and plants, regularly or always flooded, found on edges of rivers, creeks, ponds, lakes, depressions, bays or oceans.

Ecosystems

predator - an animal who eats other animals.

prey - an animal that is eaten by another animal.

niche - the role or function a plant or animal has in a community.

population - all of one kind of plants or animals in a specified area.

food chain - a series of plants and animals within an environment of which each kind serves as a source of nourishment (food) for the next in the series.

food web - a complex, interlocking series of individual food chains native species - a species originally living or growing in a certain place exotic species - a plant or animal introduced from a different area that competes with the native species.

endangered species - a species in danger of extinction (dying out)

Archaeology

artifact – any object made, modified, or used by people.

archaeology – the study of past human cultures by analyzing the materials (sites and artifacts) that people left behind.

archaeologist – a scientist who studies the buried remains of past human history.

chronology – the order of events; a timeline.

conservation – specialized care given to artifacts in order to preserve them.

culture – a people's unique behaviors, beliefs, and artifacts.

excavate – to dig an archaeological site

Boats & Buoyancy

vessel – a craft designed to navigate on water; a boat, especially a large boat.

hull – the framework or body of a boat.

bow – the front of a boat.

stern – the rear of a boat.

canoe – a slender boat with pointed ends, propelled by paddles.

paddleboat – vessel for carrying passengers and cargo, propelled by a paddlewheel.

barge – a large, unpowered, flat-bottomed boat for transporting freight.

towboat – a powerful vessel used to push or tow barges.

buoyancy – the capacity to remain afloat in liquid; upward force of a fluid on an object less dense than itself.

displacement – the weight or volume of fluid displaced (pushed out of place) by a vessel.

Urban watersheds & stewardship

watershed – the land area from where water flows to a given stream, river or lake water pollution – any substance that contaminates water making it unfit or unhealthy for use. point source pollution – water pollution that comes from a single point such as a pipe non-point source pollution – water pollution that comes from a large area such as a farm field, construction site, yard, streets or parking lots (also known as runoff pollution). sediment – particles of soil that can be carried by water or wind erosion – process by which soil, sediment or other materials are worn away and moved by water or wind. nutrient – element or substance (such as fertilizer or decayed leaves and grass) that supplies food for plant growth, but which in large concentrations can cause pollution. runoff – water from snow melting or rain that flows over land to a river or other water body.

storm drain – opening in streets and parking lots through which runoff flows into underground pipes that lead to rivers, ponds or lakes (storm drains do not lead to a water treatment plant).

impervious surface – land covering, such as concrete or asphalt, that does not allow water to pass through it into the ground.

best management practices (BMPs) – preferred actions taken to prevent pollution